GENERAL STRUCTURAL & CONSTRUCTION NOTES

THE FOLLOWING GENERAL STRUCTURAL NOTES ARE APPLICABLE TO THE STRUCTURAL DRAWINGS ONLY. THESE NOTES ARE PROVIDED FOR CONVENIENCE AND ARE SUPPLEMENTAL TO THE SPECIFICATIONS.

GENERAL

1. JOB SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. CODE: ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF THE LATEST EDITIONS OF THE (IBC) INTERNATIONAL BUILDING CODE AND ITS SUPPLEMENTS.
3. TYPICAL SECTIONS AND DETAILS: ALL SECTIONS, DETAILS AND NOTES ARE INTENDED TO BE TYPICAL UNLESS OTHERWISE DETAILED. SHOP AND ERECTION DRAWINGS SUBMITTED BY THE CONTRACTOR SHALL SHOW APPLICATION OF TYPICAL SECTIONS AND DETAILS FOR SIMILAR SITUATIONS.
4. OPENINGS AND EMBEDDED ITEMS: ALL CURBED AND OTHER OPENINGS, EQUIPMENT BASES, DEPRESSIONS, FRAMES, CASTINGS, PIPE SLEEVES, CONDUITS, INSERTS, EDGE PROTECTION, ANCHOR BOLTS AND SIMILAR ITEMS SHALL BE PROVIDED, LOCATED AND INSTALLED AS SHOWN ON APPROVED SHOP DRAWINGS FOR MANUFACTURED ITEMS AND OTHER TRADES.
5. VERIFY EXISTING UNDERGROUND UTILITIES. INFORM AND OBTAIN REQUIRED PERMITS FROM OWNERS OF SUCH UTILITIES AND COORDINATE WITH THE COR BEFORE STARTING ANY WORK.
6. THE CONTRACTOR SHALL COORDINATE NEW EQUIPMENT STRUCTURES SHOWN ON THE CONTRACT DRAWINGS WITH MANUFACTURER'S APPROVED SHOP DRAWINGS. ALL DIMENSIONS, DETAILS AND STRUCTURAL DESIGN REVISIONS REQUIRED TO ACCOMMODATE APPROVED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR AT NO COST TO THE VA.

STRUCTURAL DESIGN CRITERIA

1. PROPOSED WORK IS DESIGNED AND SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST EDITIONS OF THE FOLLOWING CODES AND STANDARDS:
   - A. GOVERNING BUILDING CODE: (IBC) INTERNATIONAL BUILDING CODE.
   - B. ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 318.
   - C. AISC MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN.
   - D. AWS STRUCTURAL WELDING CODES – D1.1 AND D1.4.
   - E. STEEL DECK INSTITUTE DESIGN MANUAL.
   - F. DEPARTMENT OF VETERANS AFFAIRS (VA) PROGRAM GUIDE PG-18-15, MAJOR RENOVATIONS.
   - G. APPLICABLE STATUES AND REGULATIONS OF FEDERAL, STATE AND LOCAL JURISDICTIONS.
2. DESIGN LOADS:

A. LIVE LOADS:

ROOF	20 PSF
OFFICE	60 PSF
CORRIDORS	100 PSF
STAIRS AND LOBBIES	100 PSF
CLINICAL AND SUPPORT SERVICES	80 PSF
MECHANICAL	AS INDICATED

B. SEISMIC:

ZONE	B
IMPORTANT FACTOR Ie	1.15
SITE CLASS	C
SITE COEFFICIENT, Fa	1.6
SITE COEFFICIENT, Fv	2.4

C. WIND LOAD:

BASIC WIND SPEED (V)	115 MPH
EXPOSURE CATEGORY	C
IMPORTANT FACTOR IW	1.15

D. SNOW LOAD:

GROUND SNOW LOAD (Pg)	30 PSF (CS)
SNOW IMPORTANCE FACTOR (Is)	1.2
EXPOSURE FACTOR (Ce)	0.9
THERMAL FACTOR (Ct)	1.0

EXISTING CONDITIONS

1. ALL DIMENSIONS, ELEVATIONS AND PHYSICAL CONDITIONS SHOWN ON THE DRAWINGS FOR EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. PRIOR TO BIDDING, CONDUCT A CAREFUL EXAMINATION OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.
2. THE EXACT EXTENT OF THE CONSTRUCTION WORK CANNOT BE NECESSARILY OR ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS, MATERIAL QUANTITIES AND EXTENT OF THE MODIFICATION WORK SHOWN ON CONTRACT DRAWINGS. PERFORM THE WORK TO MEET FIELD CONDITIONS ENCOUNTERED.
3. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE ENGINEER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE WORK AND INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED FOR APPROVAL.

CONSTRUCTION OPERATIONS

1. NOTIFY THE COR OF ANY CONFLICT ON CONTRACT DRAWINGS DURING BID. IN CASE OF CONFLICT IN THE CONTRACT DRAWINGS OR THE PROJECT SPECIFICATIONS, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
2. AFTER THE AWARD OF THE CONTRACT, THE CONTRACTOR MAY NOT SUBMIT ANY CLAIM ALLEGING INSUFFICIENT DATA, INCORRECTLY ASSUMED CONDITIONS, OR MISUNDERSTANDING WITH REGARD TO MATTERS FOR WHICH NO SUCH CLARIFICATION WAS SOUGHT DURING THE BIDDING PHASE OF THE PROJECT, AS DESCRIBED FURTHER IN THE GENERAL CONDITION CONTRACT.
3. ASSUME AN ABSOLUTE OBLIGATION TO PROTECT EXISTING STRUCTURES AND EQUIPMENT, NEW WORK AND THE GENERAL PUBLIC FROM DAMAGE, LOSS OR INJURY RESULTING FROM THE CONTRACTOR'S OPERATIONS. IN THE EVENT OF SUCH DAMAGE OR LOSS, PROMPTLY REPLACE OR RESTORE THE WORK TO AN EQUIVALENT QUALITY TO THE SATISFACTION OF THE COR AND AT NO EXPENSE TO THE VA.
4. REMOVE TO THE EXTENT INDICATED AND PROPERLY DISPOSE OF EXISTING STRUCTURES AND MATERIALS TO BE DEMOLISHED IN ACCORDANCE WITH THE SPECIFICATIONS.
5. EXCAVATIONS WHICH MAY UNDERMINE EXISTING STRUCTURES TO REMAIN SHALL BE BRACED BY A SUITABLE EXCAVATION SUPPORT SYSTEM DESIGNED IN ACCORDANCE WITH THE SPECIFICATIONS AND APPROVED BY THE ENGINEER. DESIGN SHALL BE PERFORMED BY A QUALIFIED PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF WHICH THE PROJECT IS LOCATED.
6. ALL WORK SPECIFIED HEREIN SHALL BE INSPECTED IN ACCORDANCE WITH THE BUILDING CODE AND ALL LOCAL ORDINANCES. THE COR MAY VISIT THE SITE TO ASCERTAIN GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS. SUCH SITE VISITS ARE NOT TO BE CONSTRUED AS MEETING ANY INSPECTION REQUIREMENTS UNLESS THE COR SPECIFICALLY SO STATES IN WRITING.
7. RFI & RFC ARE REQUIRED TO BE COMMUNICATED FORMALLY AND IN WRITING TO THE COR AS PROVIDED IN THIS GENERAL NOTES. THE PURPOSE OF THIS POLICY IS TO AVOID COMMUNICATION WITH UNAUTHORIZED PERSONS AND TO MINIMIZE MISINFORMATION AND SPECULATION. THE COR WILL NOT RECOGNIZE AND CANNOT BE OBLIGATED TO ANY REQUEST THAT HAS NOT BEEN COMMUNICATED IN THE MANNER SET FORTH ABOVE. THE COR CANNOT BE RESPONSIBLE FOR ANY MISCOMMUNICATION OR MISINFORMATION OBTAINED IN VIOLATION OF THIS POLICY AND RESERVES THE RIGHT TO REJECT ANY REQUEST IN THE EVENT THAT ANY PERSON FAILS TO ADHERE TO THIS POLICY.

MATERIALS OF CONSTRUCTION – STRUCTURAL

1. FOR DETAILED REQUIREMENTS AND SPECIFIED PRODUCTS SEE SPECIFICATIONS.
2. FOR REQUIRED FINISH AND PROTECTIVE COATING OF MATERIALS SEE SPECIFICATIONS.
3. CAST-IN-PLACE CONCRETE:
   A. ALL CONCRETE SHALL BE NORMAL WEIGHT AGGREGATE UNLESS OTHERWISE NOTED, OR SPECIFIED. CONCRETE SHALL CONFORM TO THE FOLLOWING TABLE:

USAGE	USAGE 28-DAY STRENGTH (PSI)	MAX WATER/CEMENT RATIO	CONCRETE SPECIFICATION
EQUIP. PADS	4000	.40	NORMAL WEIGHT
FLOOR DECK	4000	.45	LIGHT WEIGHT
ALL OTHER CONC.	4000	.40	NORMAL WEIGHT

   B. WORKABILITY ADMIXTURES MAY BE UTILIZED, PROVIDED THAT BATCH PROPORTIONS ARE DETERMINED IN THE MANNER DESCRIBED IN THE SPECIFICATIONS.
   C. USE OF ACCELERATING OR SET-RETARDING ADMIXTURES REQUIRES PRIOR APPROVAL OF THE ENGINEER. USE OF CALCIUM CHLORIDE WILL NOT BE PERMITTED.
   D. ALL CEMENT SHALL BE PORTLAND TYPE I OR II.
4. CONCRETE REINFORCEMENT:
   A. REINFORCING BARS – ASTM A615-96A, GRADE 60, UNCOATED FINISH, UNLESS OTHERWISE NOTED, OR SPECIFIED.
   B. WELDED WIRE FABRIC – ASTM A185, UNCOATED FINISH UNLESS OTHERWISE NOTED OR SPECIFIED.
   C. DETAIL AND FABRICATE REINFORCEMENT IN ACCORDANCE WITH ACI 315 DETAILING MANUAL.
   D. REINFORCING BARS AT SPLICES SHALL BE LAPPED IN ACCORDANCE WITH ACI BUILDING CODE.
   E. MINIMUM CONCRETE COVER FOR REINFORCEMENT:
      A) SURFACES CAST AGAINST SUBGRADE.. 3"
      B) FORMED SURFACES IN CONTACT WITH SOIL OR LIQUID................. 2"
      C) SURFACES NOT IN CONTACT WITH WEATHER, SOIL OR LIQUID........ 1-1/2"
   F. ALL REINFORCEMENT SHALL BE ADEQUATELY SECURED IN POSITION PRIOR TO CONCRETE PLACEMENT.
   G. REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY METAL PIPE, PIPE FLANGE, METAL CONDUIT OR OTHER METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM CLEARANCE OF 2 INCHES SHALL BE PROVIDED.
5. EMBEDMENTS:
   A. DOWELS, ANCHOR BOLTS, PIPES AND OTHER EMBEDDED ITEMS SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.
   B. CONDUITS AND OTHER SIMILAR ITEMS EMBEDDED IN OR PENETRATING THROUGH CONCRETE SHALL BE SPACED ON CENTER NOT LESS THAN 3 TIMES THEIR OUTSIDE DIMENSION, BUT NOT LESS THAN 2-1/2" CLEAR. SUCH ITEMS SHALL NOT EXCEED 1/3 OF THE MEMBER THICKNESS.
6. SPECIAL INSPECTIONS PROGRAM:
   A. CONCRETE (1704.4) MATERIAL
      REINFORCING STEEL
      IN -SITU CONCRETE STRENGTH
   B. EXPANSION BOLTS AND THREADED EXPANSION INSERTS,
   C. SOIL BEARING (1704.7)

STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE "STEEL CONSTRUCTION MANUAL", THIRTEENTH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) INCLUDING SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, AND AISC CODE OF STANDARD PRACTICE.
2. ALL STRUCTURAL STEEL SHALL BE HOT-DIPPED GALVANIZED PER ASTM A123 AND A153.
3. WIDE FLANGE SHAPES: ASTM A992, GRADE 50
4. OTHER STRUCTURAL SHAPES & PLATES: ASTM A36, A572
5. STEEL PIPE: ASTM A53, GRADE B
6. STEEL TUBING: ASTM A500, GRADE B
7. GALVANIZED STRUCTURAL STEEL:
   A. STRUCTURAL SHAPES AND RODS ASTM A123.
   B. BOLTS, FASTENERS AND HARDWARE ASTM A153.
8. ALL BOLTED CONNECTIONS SHALL BE WITH A325 HIGH STRENGTH BOLTS 3/4" MIN. DIAMETER, UNLESS NOTED OTHERWISE.
9. ANCHOR RODS SHALL CONFORM TO ASTM F1554, UNLESS NOTED OTHERWISE.
10. WELDING ELECTRODES SHALL BE E70XX FOR MANUAL ARC WELDING. ALL WELDERS SHALL BE CERTIFIED BY THE AWS. MINIMUM WELD SIZE SHALL BE 3/16" UNLESS NOTED OTHERWISE.
11. CUTS, HOLES, COPING, ETC. REQUIRED FOR OTHER TRADES OR FIELD CONDITIONS SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTTING OR BURNING OF MAIN STRUCTURAL MEMBERS IN THE FIELD WILL NOT BE PERMITTED.
12. SUBMIT SHOP DRAWINGS FOR FABRICATION AND ERECTION OF STRUCTURAL STEEL. CLEARLY INDICATE COORDINATED DIMENSIONS. SHOP AND ERECTION DRAWINGS MUST SHOW ALL SHOP/FLOOR AND FIELD WELDS. INITIAL SHOP DRAWING SUBMITTAL SHALL INCLUDE PROPOSED CONNECTION DETAILS AND JOB STANDARDS. PROVIDE SIGNED AND SEALED CALCULATIONS FOR ALL NON-STANDARD CONNECTION DETAILS SHOWING DESIGN CAPACITIES.
13. STEEL MEMBERS SHOWN ON PLAN SHALL BE EQUALLY SPACED UNLESS NOTED OTHERWISE.
14. THE GENERAL CONTRACTOR AND STEEL ERECTOR SHALL NOTIFY THE ENGINEER OF ANY FABRICATION OR ERECTION ERRORS OR DEVIATIONS AND RECEIVE WRITTEN APPROVAL BEFORE ANY FIELD CORRECTIONS ARE MADE.
15. ALTERNATE CONNECTION DETAILS MAY BE USED IF SUCH DETAILS ARE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. HOWEVER, THE ENGINEER SHALL BE THE SOLE JUDGE OF ACCEPTANCE AND THE CONTRACTOR'S BID SHALL ANTICIPATE THE USE OF THOSE DETAILS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SUCH ALTERNATE DETAILS WHICH HE PROPOSES.
16. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS AND SHALL CONFORM TO "STRUCTURAL WELDING CODE ANSI/AWS D1.1", LATEST EDITION, AMERICAN WELDING SOCIETY (AWS).
17. EXISTING FRAMING REQUIRING WELDING SHALL BE THOROUGHLY CLEANED TO ENSURE PROPER WELDING. PROVIDE TEMPORARY SHORING WHEN WELDING TO EXISTING STEEL.
18. FIELD WELDED SURFACES WITHIN 4 INCHES OF WELD SHALL BE CLEANED AND GROUND SMOOTH. AFTER WELDING COAT THE EXPOSED AREA WITH GALVANIZING REPAIR PAINT. GALVANIZING REPAIR PAINT SHALL BE A HIGH ZINC DUST CONTENT PAINT COMPLYING WITH FEDERAL SPECIFICATIONS DOD-P-21035A OR SSPC-PAINT-20, COLD GALVANIZING COMPOUND BY ZRC PRODUCTS CO. OR EQUAL.
19. GUYS AND OTHER BRACING REQUIRED TO PROVIDE LATERAL STABILITY TO STEEL FRAME SHALL BE ADEQUATELY SIZED AND ANCHORED. THIS BRACING SHALL REMAIN UNTIL PERMANENT BRACING ELEMENTS AND ATTACHED CONSTRUCTION IS INSTALLED.
20. ALL CONNECTIONS SHALL BE FRAMED BEAM CONNECTIONS DESIGNED IN ACCORDANCE WITH THE AISC MANUAL AND HALF OF THE ALLOWABLE UNIFORM LOAD FROM "MAXIMUM TOTAL UNIFORM LOAD" TABLES, BUT NOT LESS THAN 6 KIPS. PROVIDE DOUBLE ANGLE CONNECTIONS FULL DEPTH OF SUPPORTING BEAM, UNLESS OTHERWISE APPROVED. MINIMUM TWO (2) BOLTS PER CONNECTION. SINGLE ANGLE OR SHEAR TAB CONNECTIONS ARE NOT ACCEPTABLE. ALL BEAM TO COLUMN CONNECTIONS SHALL BE DESIGNED FOR THE MINIMUM SHEAR REACTION INDICATED ABOVE IN COMBINATION WITH A 10 KIP AXIAL FORCE (ACTING IN BOTH TENSION AND COMPRESSION).
21. VISUALLY INSPECT ALL FILLET WELDS. 10 PERCENT OF ALL FIELD FILLET WELDS IN PRIMARY CONNECTIONS AND MULTI-PASS WELDS SHALL BE TESTED BY THE MAGNETIC PARTICLE METHOD, COMPLYING WITH ASTM E709, PERFORMED ON THE ROOT PASS AND ON THE FINISHED WELD.
22. FIELD TEST BOLTED CONNECTIONS IN ACCORDANCE WITH AISC.
23. ALL CONNECTIONS SHALL BE SYMMETRICAL ABOUT THE AXIS OF THE MEMBER CONNECTED. PROVIDE ONLY ONE GRADE OF BOLT FOR EACH BOLT DIAMETER TO BE USED IN THE CONNECTIONS. DO NOT MIX GRADES OF BOLTS.
24. PROVIDE 1/4" CAP PLATES ON ALL EXPOSED HSS MEMBER ENDS UNLESS NOTED OTHERWISE.

SELECTIVE DEMOLITION NOTES

1. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PERSONS AND DAMAGE TO ADJACENT STRUCTURES, FACILITIES AND SITE IMPROVEMENTS TO REMAIN. ENSURE SAFE PASSAGE OF PERSONS AROUND SELECTIVE DEMOLITION AREA. LOCATE AND RE-ROUTE ANY EXISTING UTILITY PRIOR TO STARTING THE WORK.
2. DEMOLISH AND REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS, OR AS OTHERWISE NECESSARY TO ACCOMMODATE NEW CONSTRUCTION. USE METHODS REQUIRED TO COMPLETE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS.
3. PROMPTLY PATCH AND REPAIR DAMAGED SURFACES IN ADJOINING CONSTRUCTION TO REMAIN, WHICH ARE CAUSED BY SELECTIVE DEMOLITION OPERATIONS.
4. THE VA WILL USE AND OCCUPY PORTIONS OF THE FACILITY AND SITE IMMEDIATELY ADJACENT TO SELECTIVE DEMOLITION AREA. COORDINATE WITH THE COR AND CONDUCT SELECTIVE DEMOLITION SO THAT VA'S OPERATIONS WILL NOT BE DISRUPTED. PROVIDE NOT LESS THAN 72 HOURS' NOTICE TO THE VA FOR MINOR DISRUPTION, AND TWO WEEKS FOR MAJOR DISRUPTION OF ACTIVITIES THAT WILL AFFECT VA'S OPERATIONS AS DETERMINED BY THE COR.
5. THE VA ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITIONS OF COMPONENTS AND SITE ELEMENTS TO BE SELECTIVELY DEMOLISHED.
6. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS OFF-SITE. DO NOT PERMIT DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. TRANSPORT DEMOLISHED MATERIALS OFF THE VA'S PROPERTY AND DISPOSE OF IN A SAFE AND LAWFUL MANNER.

STRUCTURAL FASTENERS

1. HIGH STRENGTH BOLTS; ASTM A325, TYPE 1, UNLESS NOTED OTHERWISE. MINIMUM SIZE 3/4" UNLESS NOTED OTHERWISE.
2. COLUMN ANCHOR BOLTS: ASTM A307.
3. MECHANICAL EXPANSION ANCHORS: WEDGE-TYPE, AISI 304 STAINLESS STEEL.
4. CHEMICAL ADHESIVE ANCHORS: AISI 304 STAINLESS STEEL BOLT ASSEMBLY AND VINYL ESTER RESIN ADHESIVE.

WELDING

1. WELDING ELECTRODES: E70XX (AWS A5.1 OR A5.5). USE LOW HYDROGEN ELECTRODES FOR FIELD WELDING.
2. ALL GROOVE AND BUTT WELDS SHALL BE FULL PENETRATION.
3. FILLET WELD SIZES SHALL BE THE MINIMUM SIZE REQUIRED BY AISC CODE FOR PLATE SIZES TO BE CONNECTED AND SHALL BE APPLIED TO THE ENTIRE JOINTCONTACT LENGTH, BUT NOT LESS THAN 3/16".
4. NO FIELD WELDING OR BURNING OF STRUCTURAL STEEL WILL BE PERMITTED WITHOUT HOTWORK PERMIT FROM THE COR.

ABBREVIATIONS

A.B.	ANCHOR BOLT	L.P.	LOW POINT
ADDL.	ADDITIONAL	L.W.	LIGHT WEIGHT
A.F.F.	ABOVE FINISH FLOOR	LLH	LONG LEG HORIZONTAL
ALT.	ALTERNATE	LLV	LONG LEG VERTICAL
ARCH.	ARCHITECT	LWB	LONG WAY BOTTOM
B.C.E.	BOTTOM CHORD EXTENSION	M.E.P.	MECHANICAL ELECTRICAL PLUMBING
B.O.	BOTTOM OF	M.S.T.	METAL STUD TRUSS
BLDG.	BUILDING	MAX.	MAXIMUM
BM.	BEAM	MECH.	MECHANICAL
BOTT.	BOTTOM	MEZZ.	MEZZANINE
BRG.	BEARING	MFR.	MANUFACTURER
BSMT.	BASEMENT	MIN.	MINIMUM
BP_	BEARING PLATE	MISC.	MISCELLANEOUS
BTWN.	BETWEEN	MP_	MASONRY PIER
℄	CENTERLINE	NBL	NON BEARING LINTEL
CANT.	CANTILEVER	(N)	NEW
C.J.	CONSTRUCTION JOINT	N.T.S.	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT	N.W.	NORMAL WEIGHT
CNTR.	CENTER/CENTERED	o/c	ON CENTER
COL.	COLUMN	P.A.F.	POWDER ACTUATED FASTENER
CONC.	CONCRETE	PL	PLATE
CONN.	CONNECTION	PLUMB.	PLUMBING
CONT.	CONTINUOUS	PC	PILE CAP
COORD.	COORDINATE	P/C	PRECAST
Ø	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DWG.	DRAWING	PSI	POUNDS PER SQUARE INCH
(E)	EXISTING	PTN.	PARTITON
EA.	EACH	REINF.	REINFORCEMENT
E.F.	EACH FACE	REQ'D.	REQUIRED
EL.	ELEVATION	RET'G.	RETAINING
ELECT.	ELECTRICAL	S.F.	STEP FOOTING
ELEV.	ELEVATOR	S.O.G.	SLAB ON GRADE
EMBED.	EMBEDMENT	SCHED.	SCHEDULE
E.O.D.	EDGE OF DECK	SECT.	SECTION
E.O.S.	EDGE OF SLAB	SIM.	SIMILAR
EQ.	EQUAL	SPECS.	SPECIFICATIONS
EQUIP.	EQUIPMENT	STL.	STEEL
E.W.	EACH WAY	STIFF.	STIFFENER
EWB	EACH WAY BOTTOM	STRUCT.	STRUCTURAL
EWT	EACH WAY TOP	SWB	SHORT WAY BOTTOM
EXIST.	EXISTING	T&B	TOP AND BOTTOM
EXP.	EXPANSION	T.	TOP
EXT.	EXTERIOR	T.O.	TOP OF
FDN.	FOUNDATION	T.O.C.	TOP OF CONCRETE
FIN.	FINISH	T.O.S.	TOP OF STEEL
FLR.	FLOOR	T.S.	THICKENED SLAB
FT.	FEET	TCELE	TOP CHORD EXTENSION LEFT END
FTG.	FOOTING	TCERE	TOP CHORD EXTENSION RIGHT END
GA.	GAGE	TDS	TURN DOWN SLAB
GALV.	GALVANIZED	THK.	THICK OR THICKENED
GB_	GRADE BEAM	TYP.	TYPICAL
H.P.	HIGH POINT	U.N.O.	UNLESS NOTED OTHERWISE
HORIZ.	HORIZONTAL	V.I.F.	VERIFY IN FIELD
I.F.	INSIDE FACE	VERT.	VERT.
IN.	INCHES	W.R.T.	WOOD ROOF TRUSS
INFO.	INFORMATION	W/	WITH
INT.	INTERIOR	WC	WET COLUMN
JT.	JOINT	WP	WALL PLATE
k	KIP	WWF	WELDED WIRE FABRIC
k-ft	KIP-FEET		

100 % BID DOCUMENT - NOT FOR CONSTRUCTION

FULLY SPRINKLERED

NO.	DESCRIPTION	DATE

CONSULTANTS:

PF&A DESIGN
ARCHITECTURE, PLANNING, INTERIORS
World Trade Center
101 West Main Street, Suite 7000
Norfolk, VA 23510
Phone: 757-471-0537
Fax: 757-471-4205
www.pfa-architect.com - Project No: 2194.14A

MILLER-REMICK LLC
PROFESSIONAL ENGINEER

ANTHONY D. PACARO, JR. REGISTERED 21214 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

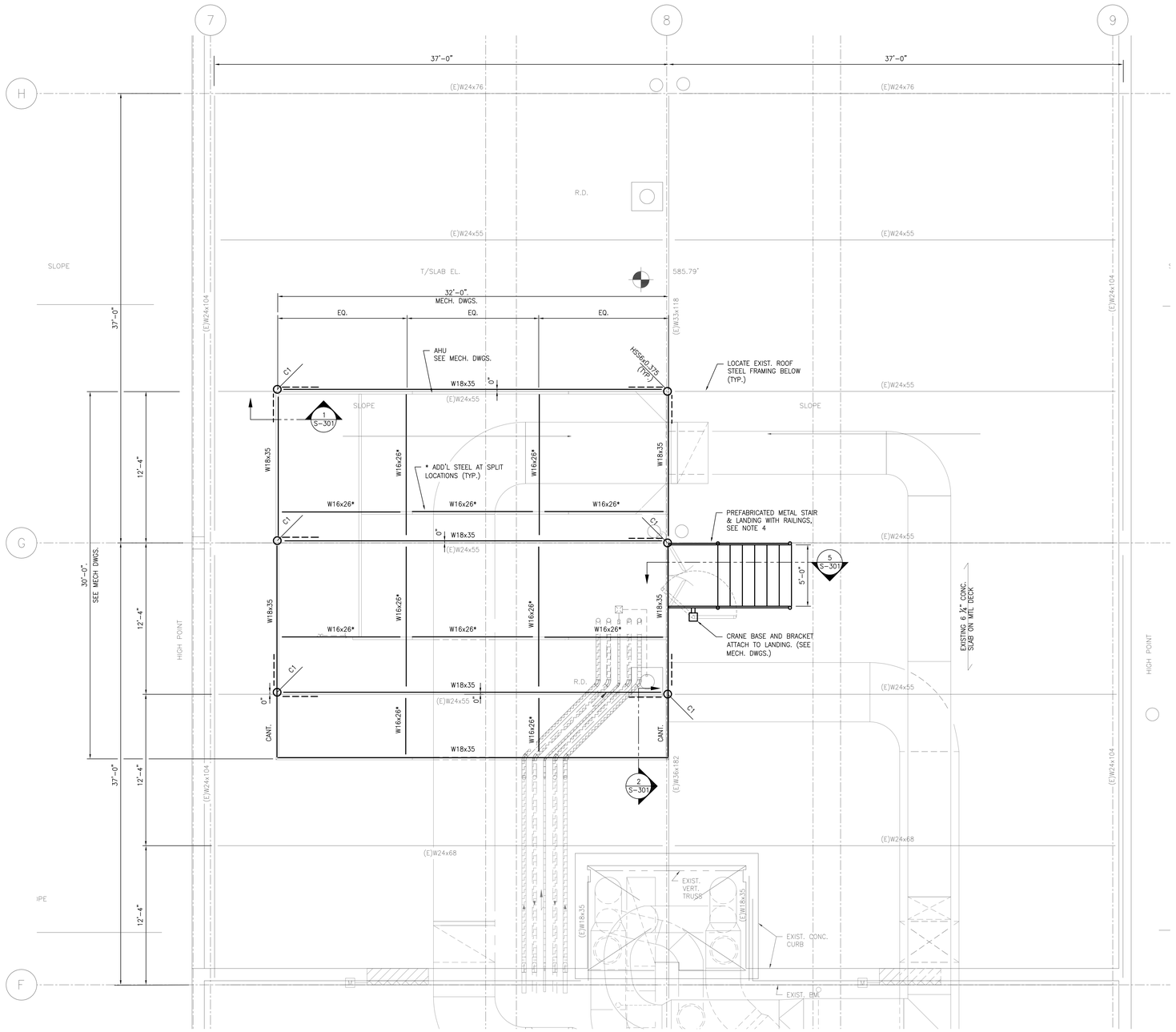
Miller-Remick LLC
M.E.P. & Structural Engineering
A Service Disabled Veteran Owned Small Business
1010 KINGS HIGHWAY SOUTH
CHERRY HILL, NEW JERSEY 08034
PHONE: (856)429-4000
FAX: (856)429-5002
MR PROJECT NO: 0499-0065, 0066 & 0067

SDVOSB – Service Disabled Veteran Owned Small Business – CVE

PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

Drawing Title	Project Title	Project Numbers	
STRUCTURAL NOTES AND ABBREVIATIONS	BUILDING 500 AC-19, AC-20 REPLACEMENT & INTERSTITIAL UPGRADE	613-12-107 613-15-300 613-15-312	Office of Construction and Facilities Management
Approved: Project Director	Location: VAMC MARTINSBURG, WV; Building Number: BLDG. 500	Drawing Number: SC001	Department of Veterans Affairs
	Date: 07-08-2016; Checked: ST; Drawn: DS		

VA FORM 08-6231

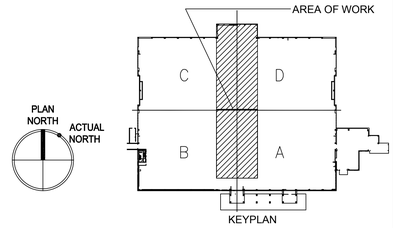


NOTES:
1. *W16 DENOTES FRAMING TO BE LOCATED TO SUIT SELECTED A.H.UNIT.
2. MAX. DESIGN OPERATING WEIGHT OF A.H.U. IS 45,000 LBS.

1 NEW A.H.U. DUNNAGE FRAMING
PARTIAL EXISTING ROOF FRAMING PLAN
SCALE: 1/4"=1'-0"

GENERAL SHEET NOTES:

1. FOR GENERAL STRUCTURAL NOTES SEE DRAWING SC001.
2. NEW DUNNAGE POSTS MUST BE SUPPORTED ON EXISTING ROOF FRAMING SHOWN WITH LIMITED INFORMATION BASED ON DRAWING No. 500-S35R. DATED 5/04/1979.
3. COORDINATE LOCATION, DIMENSIONS AND INFORMATION NOT SHOWN WITH MECHANICAL DRAWINGS.
4. PREFABRICATED STRUCTURAL STEEL STAIR AND LANDING SHALL BE HOT-DIP-GALVANIZED INDUSTRIAL GRADE CONFORMING TO OSHA STANDARD 1910.24 (FIXED INDUSTRIAL STAIRS) WITH NOMINAL 45 DEGREES ANGLE OF RISE, 10" MINIMUM STRUCTURAL CHANNEL STRINGERS, 1¼" FACTORY WELDED HANDRAILS, AND 9" EXTRA HEAVY DUTY BAR GRATING STAIR TREADS AND LANDING, AS MANUFACTURED BY FS INDUSTRIES PROVIDENCE, RI, FS INDUSTRIES.COM 800-421-0314 OR APPROVED EQUIVALENT.



100 % BID DOCUMENT - NOT FOR CONSTRUCTION

FULLY SPRINKLERED

NO.	DESCRIPTION	DATE

CONSULTANTS:

PF&A DESIGN
ARCHITECTURE, PLANNING, INTERIORS
World Trade Center
101 West Main Street, Suite 7000
Norfolk, VA 23510
Phone: 757-471-0537
Fax: 757-471-4205
www.pfa-architect.com - Project No: 2194.14A

MILLER-REMICK LLC
PROFESSIONAL ENGINEER
ANTHONY D. PALUMBO
REGISTERED
21214
STATE OF
PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

Miller-Remick LLC
M.E.P. & Structural Engineering
A Service Disabled Veteran Owned Small Business
1010 KINGS HIGHWAY SOUTH
CHERRY HILL, NEW JERSEY 08034
PHONE: (856)429-4000
FAX: (856)429-5002
SDVOSB
CVE

MR PROJECT NO: 0499-0065, 0066 & 0067

PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

Drawing Title	STRUCTURAL 6TH FLOOR / ROOF SOUTH A.H.U. DUNNAGE FRAMING PLAN
Approved: Project Director	
Project Title	BUILDING 500 AC-19, AC-20 REPLACEMENT & INTERSTITIAL UPGRADE
Location	VAMC MARTINSBURG, WV
Building Number	BLDG. 500
Date	07-08-2016
Checked	ST
Drawn	DS
Project Numbers	613-12-107 613-15-300 613-15-312
Drawing Number	SF101

Office of Construction and Facilities Management

Department of Veterans Affairs

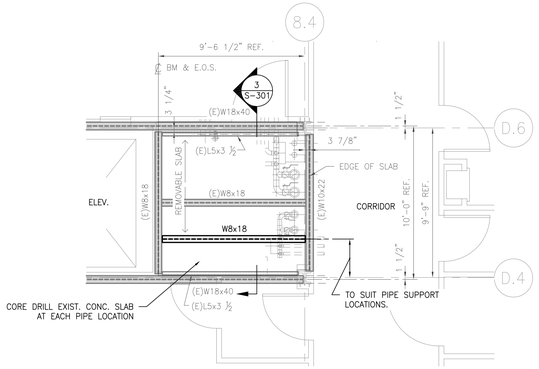
VA FORM 08-6231

P:\0499_DVA\3-0499-0066 Martinsburg AC 20 Replacement\2_Drawings\1_Cad\1_Current Submittal Phase\3_Structural\SF101.dwg 7-08-16 12:20:47 PM disturbivant

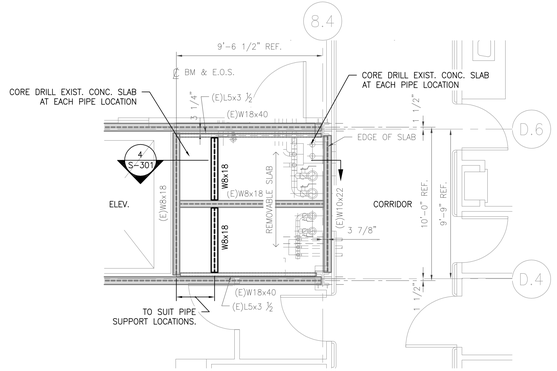
three inches = one foot 6"
one and one half inches = one foot 0
one inch = one foot 0
three quarters inch = one foot 0
one half inch = one foot 0
three eighths inch = one foot 0
one quarter inch = one foot 0
one eighth inch = one foot 0

GENERAL SHEET NOTES:

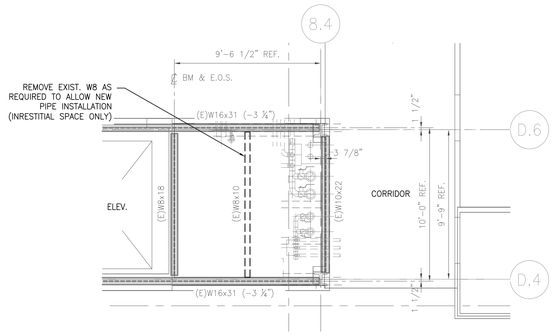
1. FOR GENERAL STRUCTURAL NOTES SEE DRAWING SC001.
2. EXISTING FRAMING LIMITED INFORMATION IS BASED ON DRAWING No. 500-S35R, DATED 5/04/1979.
3. COORDINATE LOCATION, DIMENSIONS AND INFORMATION NOT SHOWN WITH MECHANICAL DRAWINGS.



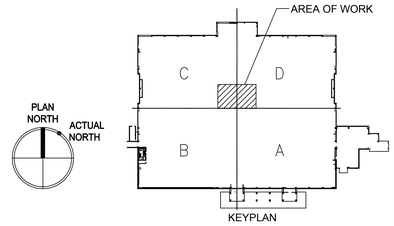
1 PARTIAL FLOOR FRAMING PLAN – TYPICAL 1ST, 2ND & 6TH FLOOR
SCALE: 1/4"=1'-0"



2 PARTIAL FLOOR FRAMING PLAN – TYPICAL 3RD, 4TH & 5TH FLOOR
SCALE: 1/4"=1'-0"



3 PARTIAL FLOOR FRAMING PLAN – TYPICAL INTERSTITIAL @ BASEMENT, 1ST & 2ND FLOOR
SCALE: 1/4"=1'-0"



100 % BID DOCUMENT - NOT FOR CONSTRUCTION

FULLY SPRINKLERED

NO.	DESCRIPTION	DATE

CONSULTANTS:

PF&A

PF&A DESIGN
ARCHITECTURE, PLANNING, INTERIORS
World Trade Center
101 West Main Street, Suite 7000
Norfolk, VA 23510
Phone: 757-471-0537
Fax: 757-471-4205
www.pfa-architect.com - Project No: 2194.14A

MILLER-REMICK LLC
PROFESSIONAL ENGINEER

ANTHONY D. PECAUDO JR. REGISTERED 21214 STATE OF VIRGINIA PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

Miller-Remick LLC
M.E.P. & Structural Engineering
A Service Disabled Veteran Owned Small Business
1010 KINGS HIGHWAY SOUTH
CHERRY HILL, NEW JERSEY 08034
PHONE: (856)429-4000
FAX: (856)429-5002

SDVOSB CVE

MR PROJECT NO: 0499-0055, 0066 & 0067

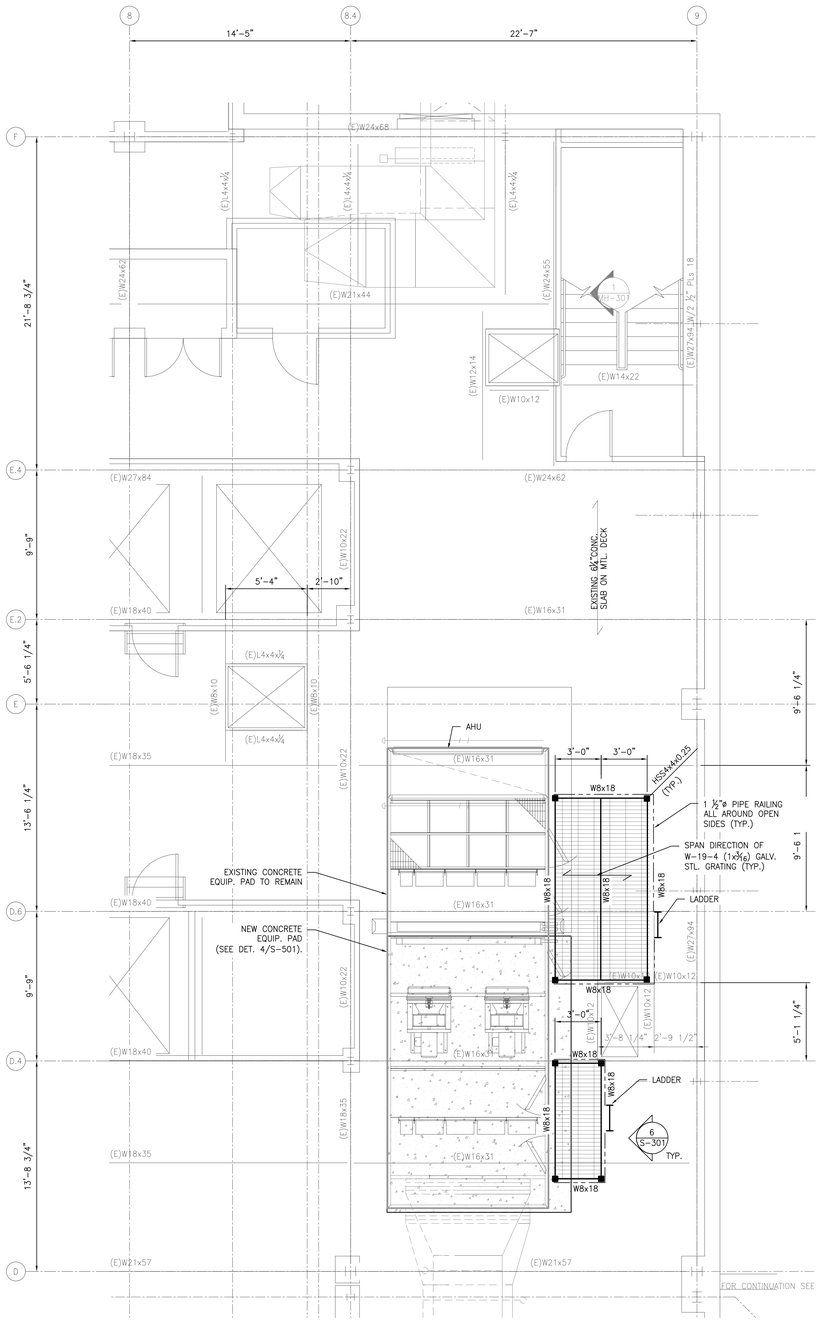
PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

Drawing Title	STRUCTURAL PARTIAL FLOOR FRAMING PLANS
Approved: Project Director	
Project Title	BUILDING 500 AC-19, AC-20 REPLACEMENT & INTERSTITIAL UPGRADE
Location	VAMC MARTINSBURG, WV
Building Number	BLDG. 500
Date	07-08-2016
Checked	ST
Drawn	DS
Project Numbers	613-12-107 613-15-300 613-15-312
Drawing Number	SF102

Office of Construction and Facilities Management

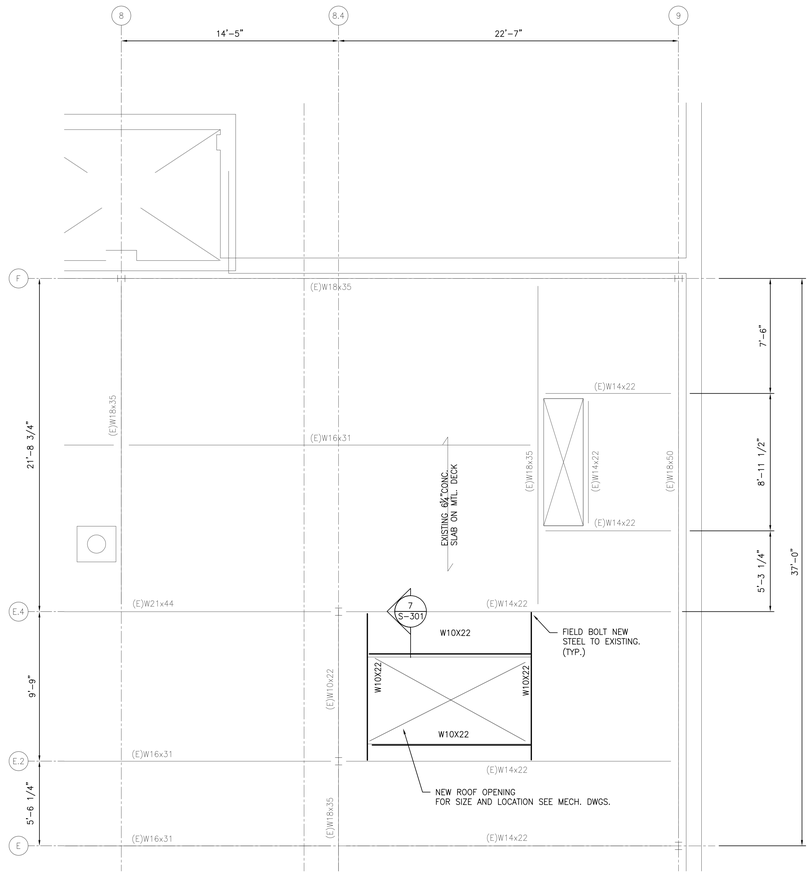
Department of Veterans Affairs

VA FORM 08-6231



NOTE:
1. MAX. DESIGN WEIGHT OF A.H.U. IS 30,000 LBS.
2. COORDINATE WALKWAYS AND LADDERS LOCATION, DIMENSIONS, AND ELEVATION WITH APPROVED A.H.U.

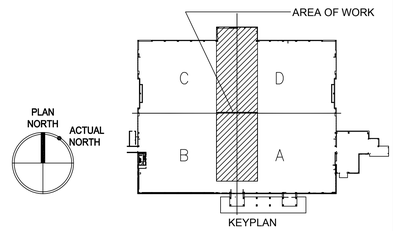
1 A.H.U.– PARTIAL PENTHOUSE FLOOR PLAN
SCALE: 1/4"=1'-0"



2 ROOF OPENING FRAMING– PARTIAL PENTHOUSE ROOF PLAN
SCALE: 1/4"=1'-0"

GENERAL SHEET NOTES:

1. FOR GENERAL STRUCTURAL NOTES SEE DRAWING SC001.
2. EXISTING FRAMING SHOWN WITH LIMITED INFORMATION BASED ON DRAWING No. 500-S36R. DATED 5/04/1979.
3. COORDINATE LOCATION, DIMENSIONS AND INFORMATION NOT SHOWN WITH MECHANICAL DRAWINGS.



100 % BID DOCUMENT - NOT FOR CONSTRUCTION

FULLY SPRINKLERED

NO.	DESCRIPTION	DATE

CONSULTANTS:

PF&A DESIGN
ARCHITECTURE, PLANNING, INTERIORS
World Trade Center
101 West Main Street, Suite 7000
Norfolk, VA 23510
Phone: 757-471-0537
Fax: 757-471-4205
www.pfa-architect.com - Project No: 2194.14A

MILLER-REMICK LLC
PROFESSIONAL ENGINEER
ANTHONY D. PACIULLI — REGISTERED — 21214 — STATE OF VIRGINIA — PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

Miller-Remick LLC
M.E.P. & Structural Engineering
A Service Disabled Veteran Owned Small Business
1010 KINGS HIGHWAY SOUTH
CHERRY HILL, NEW JERSEY 08034
PHONE: (856)429-4000
FAX: (856)429-5002
MR PROJECT NO: 0499-0065, 0066 & 0067

SDVOSB — CVE

PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

Drawing Title	STRUCTURAL 7TH FLOOR SOUTH FRAMING PLAN
Approved: Project Director	
Project Title	BUILDING 500 AC-19, AC-20 REPLACEMENT & INTERSTITIAL UPGRADE
Location	VAMC MARTINSBURG, WV
Building Number	BLDG. 500
Date	07-08-2016
Checked	ST
Drawn	DS
Project Numbers	613-12-107 613-15-300 613-15-312
Drawing Number	SF103

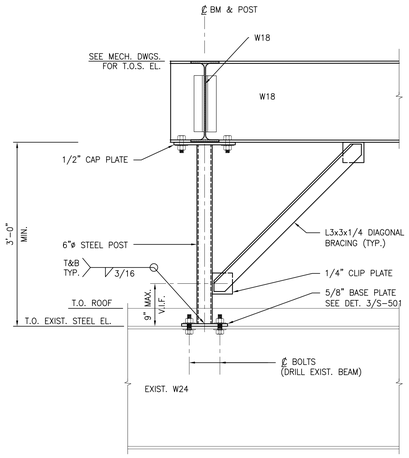
Office of Construction and Facilities Management

Department of Veterans Affairs

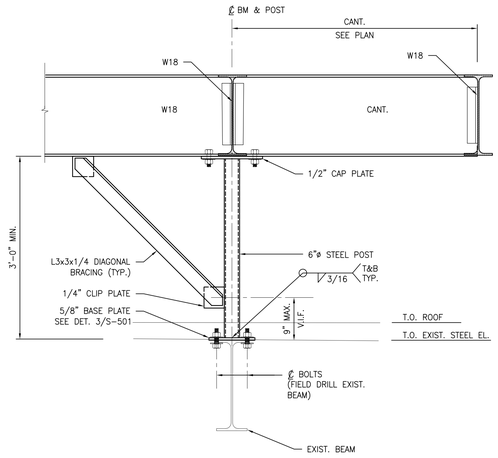
VA FORM 08-6231

P:\0499_BVA\3-0499-0066 Martinsburg AC 20 Replacement\2_Drawings\1_Load\1_Current Submittal Phase\3_Structural\SF103.dwg 7-08-16 12:21:21 PM dsturdivant

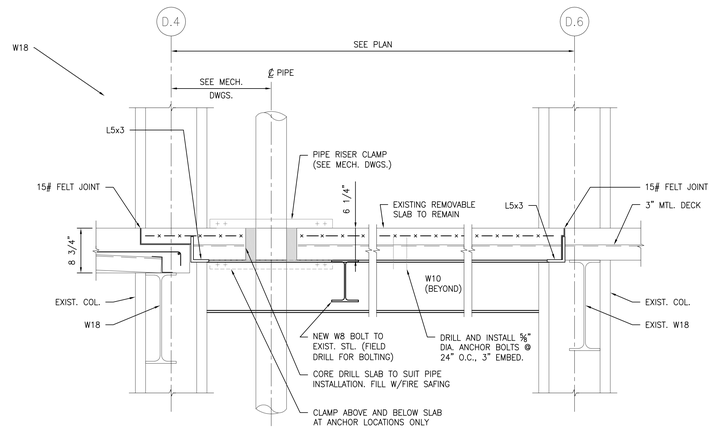
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
three inches = one foot
one and one half inches = one foot



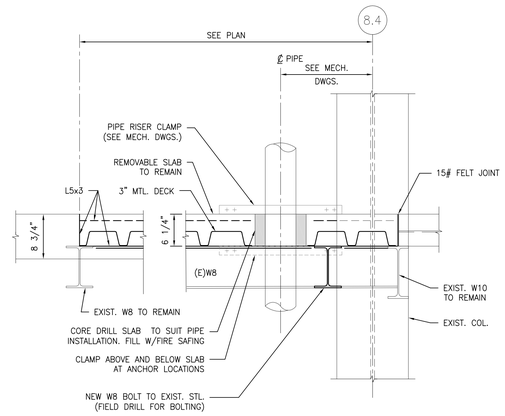
1 SECTION
SCALE: 1" = 1'-0"



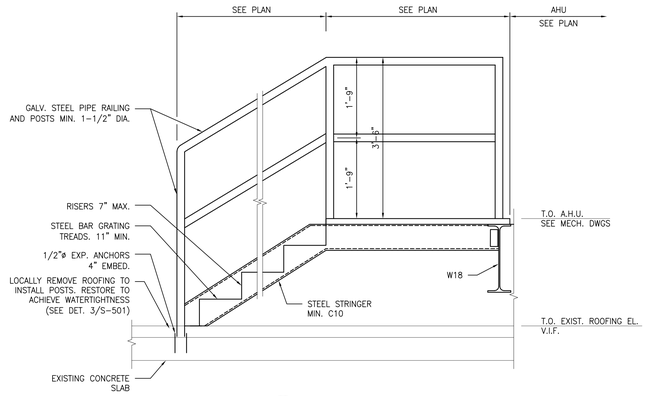
2 SECTION
SCALE: 1" = 1'-0"



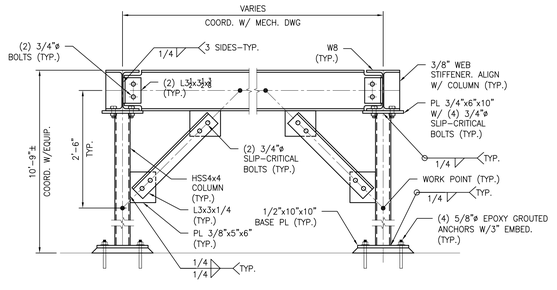
3 SECTION
SCALE: 1" = 1'-0"



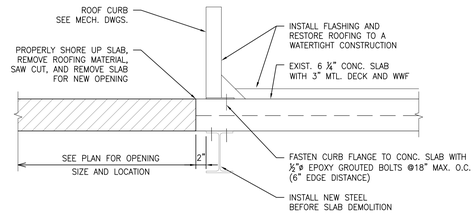
4 SECTION
SCALE: 1" = 1'-0"



5 SECTION
SCALE: 3/4" = 1'-0"



6 SECTION
SCALE: 1" = 1'-0"



7 SECTION
SCALE: 1" = 1'-0"

100 % BID DOCUMENT - NOT FOR CONSTRUCTION

FULLY SPRINKLERED

NO.	DESCRIPTION	DATE

CONSULTANTS:

PF&A DESIGN
ARCHITECTURE, PLANNING, INTERIORS
World Trade Center
101 West Main Street, Suite 7000
Norfolk, VA 23510
Phone: 757-471-0537
Fax: 757-471-4205
www.pfa-architect.com - Project No: 2194.14A

MILLER-REMICK LLC
PROFESSIONAL ENGINEER
ANTHONY D. PACIULLO
21214
REGISTERED
STATE OF
PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

***Miller-Remick** LLC*
M.E.P. & Structural Engineering
A Service Disabled Veteran Owned Small Business
1010 KINGS HIGHWAY SOUTH
CHERRY HILL, NEW JERSEY 08034
PHONE: (856)429-4000
FAX: (856)429-5002
MR PROJECT NO: 0499-0065, 0066 & 0067
SDVOSB
CVE
PRINTS OF THIS DRAWING SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER.

Drawing Title	STRUCTURAL SECTIONS AND DETAILS
Approved: Project Director	
Project Title	BUILDING 500 AC-19, AC-20 REPLACEMENT & INTERSTITIAL UPGRADE
Location	VAMC MARTINSBURG, WV
Building Number	BLDG. 500
Date	07-08-2016
Checked	ST
Drawn	DS
Project Numbers	613-12-107 613-15-300 613-15-312
Drawing Number	S-301

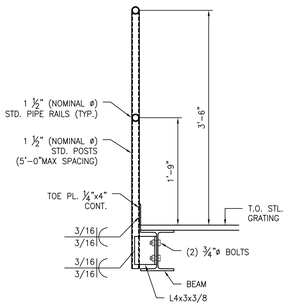
Office of Construction and Facilities Management

Department of Veterans Affairs

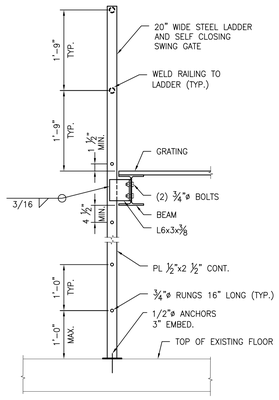
VA FORM 08-6231

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

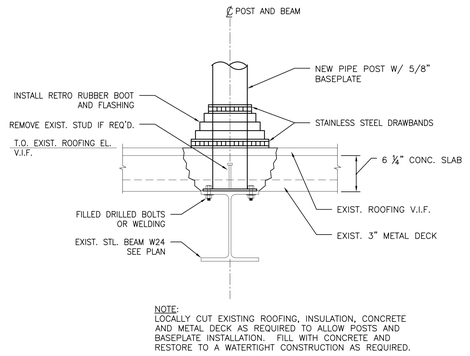
P:\0499_DVA\3-0499-0066 Martinsburg AC 20 Replacement\2_Drawings\1_Cad\1_Current Submittal Phase\3_Structural\S-301.dwg 7-08-16 12:21:33 PM dsturdivant



1 TYPICAL RAILING DETAIL
SCALE: 1" = 1'-0"

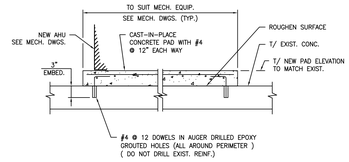


2 TYPICAL LADDER DETAIL
SCALE: 3/4" = 1'-0"

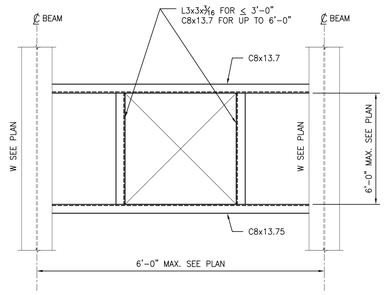


NOTE:
LOCALLY CUT EXISTING ROOFING, INSULATION, CONCRETE AND METAL DECK AS REQUIRED TO ALLOW POSTS AND BASEPLATE INSTALLATION. FILL WITH CONCRETE AND RESTORE TO A WATERTIGHT CONSTRUCTION AS REQUIRED.

3 TYPICAL POST ROOF PENETRATION – DETAIL
SCALE: 3/4" = 1'-0"



4 TYPICAL EQUIPMENT PAD DETAIL
SCALE: 3/4" = 1'-0"



NOTE:
COORDINATE OPENING LOCATION AND SIZE WITH MECHANICAL DRAWINGS.

5 TYPICAL PLAN AT FLOOR OPENING
SCALE: 3/4" = 1'-0"

100 % BID DOCUMENT - NOT FOR CONSTRUCTION

FULLY SPRINKLERED

NO.	DESCRIPTION	DATE

CONSULTANTS:

PF&A

PF&A DESIGN
ARCHITECTURE, PLANNING, INTERIORS
World Trade Center
101 West Main Street, Suite 7000
Norfolk, VA 23510
Phone: 757-471-0537
Fax: 757-471-4205
www.pfa-architect.com - Project No: 2194.14A

MILLER-REMICK LLC
PROFESSIONAL ENGINEER

ANTHONY D. PACHO
REGISTERED
21214
STATE OF
PROFESSIONAL ENGINEER

ARCHITECT/ENGINEERS:

Miller-Remick LLC
M.E.P. & Structural Engineering
A Service Disabled Veteran Owned Small Business
1010 KINGS HIGHWAY SOUTH
CHERRY HILL, NEW JERSEY 08034
PHONE: (856)429-4000
FAX: (856)429-5002
MR PROJECT NO: 0499-0065, 0066 & 0067

SDVOSB
CVE

Drawing Title	STRUCTURAL TYPICAL DETAILS
Approved: Project Director	
Project Title	BUILDING 500 AC-19, AC-20 REPLACEMENT & INTERSTITIAL UPGRADE
Location	VAMC MARTINSBURG, WV
Building Number	BLDG. 500
Date	07-08-2016
Checked	ST
Drawn	DS
Project Numbers	613-12-107 613-15-300 613-15-312
Drawing Number	S-501

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231